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STUDIES ON THE GRASS FLORA OF ERSTWHILE MADRAS PRESIDENCY— A REVIEW

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A scrutiny of the specimens deposited in MH shows that many early collectors like Barber, Beddome, Bidie, Bourne, Chandrasekaran, Cherian Jacob, Daniel Sundararaj, Gray, Lawson and Narayanaswamy, took a special interest in grasses.

Rangachariar and Tadulinga Mudaliar (1921) wrote the first book on South Indian grasses, containing an illustrated account of 103 taxa. Treatment of the genus *Cynodon* gives ample evidence to their critical approach. Hooker (1896) recorded only one species of *Cynodon* viz. *C. dactylon* (L.) Pers. Rangachariar and Tadulinga Mudaliar could recognise two more distinct species namely *C. barberi* and *C. intermedius* (*C. arcauatus* J. S. Presl *ex* C. B. Presl is the correct name). The distribution of these species in other parts of India could be established only recently. Jain's (1966) studies show that these plants were collected on several occasions from Northern, Central and Eastern India, as far back as 1864, under the name *Cynodon dactylon.* Jivanna Rao (1923) dealt with the fodder grasses of South India. Jacob (1938, '39, '40, '42) studied the grass flora of Kollegal, Chitoor District, North & South Arcot and erstwhile Travancore State. Sakharam Rao (1957) listed the grasses of Coimbatore District. Recently Karthikeyan (1971, 1971 a, 1972) prepared detailed accounts on the grasses of former Madras Presidency. Accounts on the grass flora of other areas of this region include Andiappan & Wilson (1963), Chacko (1954), Chandrasekhara Iyer (1941), Chandrasekharan and Sundararaj (1946, 1949), Cinnamani (1968, 1969), Desai and Murthy (1950), Govindu and Thirumalachar (1949), Madhava Rao and Ramalingam (1965), Sundararaghavan & Rao (1961) and Suxena (1944-'46). Most of the other works form parts of floras or floristic lists (see references).

J. D. Hooker (1896) reported 324 grasses from the area. Fischer (1936) included 411 in Gamble's *Flora of the Presidency of Madras.* Bor (different years) and other workers (see 'references') added a few more to this list. Karthikeyan (1971) compiled additional information on 71 taxa. Subsequently some new taxa like *Arundinella setosa* Trin. var. *nilagiriana* Subbarao & Kumari (1976), *Brachiaria nilagirica* Bor (1973), *Capillipedium magdaleni* Almeida (1975) *Enteropogon coimbatorensis* Nair, Jain & Nayar (1977), *Ischaemum vembanadense* Patil & D' Cruz (1973), *Manisuris mysorensis* Jain & Hemadri (1968), *Ochlandra ebracteata* Raizada & Chatterjee (1963) and *Zenkeria sebastinei* Henry & Chandrabose (1973) were discovered. *Lepturus radicans* (Steud.) A. Camus (Deshpande & Singh 1976), *Eulalia thwaitesii* (Hack.) O. Ktze. (Shetty, Karthikeyan & Vivekananthan, 1973) and *Leptaspis urceolata* (Roxb.) R. Br. (Rao, 1964) are some of the recent additions to the Indian grass flora from South India.

There is good degree of endemism among South Indian grasses. Some of these endemic elements are not at all or are very poorly represented in Indian herbaria. According to Bor (1960), *Bothriochloa compressa* (Hook. f.) Henr.

[present name *Dichanthium compressum* (Hook. f.) Jain *et* Deshpande 1978] is so far known only from two collections. Some plants like *Dichanthium pallidam* (Hook. f.) Stapf *ex* Fischer, *Heteropogon polystachyos* (Roxb.) Schult., *Agrostis schmidii* (Hook. f.) Bor and *Eragrostis rottleri* Stapf are known only from very old type collections. Other examples of similar rare plants include *Arthraxon depressus* Stapf *ex* Fischer, *Chrysopogon velutinus* (Hook. f.) Bor, *Dimeria acutipes* Bor, *D. bialata* Fischer and *Ischaemum dalzellii* Stapf *ex* Bor. It is possible that some of these might be extinct. It is also probable that some are very restricted in distribution, in specialised habitats. However, this can be confirmed only after a thorough search. A few of these 'lost' plants have been relocated recently. *Manisuris divergens* (Hack.) O. Ktze. known earlier only from the type collection has been gathered from Coorg, Karnataka, after a gap of more than thirteen decades (Jain, 1967). Shetty and Vivekananthan (1972) similarly made the second collection of *Isachne fischeri* Bor from the type locality, Anaimudi, after a gap of more than 35 years. The collection of *Garnotia exaristata* Gould (Shetty, Karthikeyan & Vivekananthan, 1973) and *Parahyparrhenia bellariensis* (Hack.) Clayton (Deshpande, Singh and Sundararaghavan, 1978) are other similar examples.

Grasses of Andhra Pradesh and Kerala, especially those of the plains appear to be inadequately represented in MH. Steps will have to be taken to fill up this lacuna so as to augument our knowledge of the grass flora of the area.

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